Conservation Cover

Conservation Practice Job Sheet (327)
Introduced Grass Planting
Kentucky

Natural Resources Conservation Service (NRCS) **August 2003**

Participant Name _____

INFORMATION ON THIS JOB SHEET IS CONSIDERED TO BE PART OF THE CONTRACT AND/OR CONSERVATION PLAN.

Definition

This Conservation Cover job sheet will be used in establishing pure stands of introduced grasses and mixed stands of introduced grasses and compatible legumes and/or forbs as part of a conservation plan.

Purpose

Establish introduced grasses, legumes, and forb species to provide conservation cover and wildlife habitat for grassland dependent species.

Conditions Where Practice Applies

This practice applies on land that will be retired from agricultural production requiring permanent protective cover and other lands needing permanent protective cover. This practice does not apply to plantings for forage production or to critical area plantings. (Check program rules to determine if harvesting such as for grazing or hay is allowed).

Establishment Specifications

1. Depending upon the species, introduced grasses may be planted in the spring or in the fall. Spring seeding is during the period Feb. 1 and May 15 and fall seeding is during the period Aug. 1 and Oct. 10. Legume and forb species can also be seeded at appropriate times during or after introduced grass planting. Note: Annual grass, legume, and forb species may only be seeded during the spring.

2. Species and seeding rates will be according to Table 3.

3. Seed will conform to minimum state standards for purity, germination and other features. Seed tags and other information may be requested by NRCS representatives to verify contract compliance.

4. Fertilizer and lime applications, when planned, shall be made according to University of Kentucky recommendations based on a soil test analysis performed consistent with University of Kentucky laboratory soil test procedures.

5. Competition control, seedbed preparation and seeding shall be done according to the following information.

<u>Competition Control Before Planting</u>

Competition control is critical to ensuring a good stand of introduced grasses. In most situations this control should begin prior to the seeding and seedbed operations. Either conventional seedbed preparation or herbicide application/s or both may be used to control competition prior to planting introduced grasses and legumes.

Several steps are required to get successful competition control when using a *herbicide* to eradicate existing vegetation.

The first step in killing existing vegetation with herbicides is to remove excessive top growth that may be present. Removal can be accomplished by mowing or grazing the area immediately prior to beginning the recommended herbicide application program. If possible after mowing, remove the hay to allow for better herbicide contact (check program rules to determine if grazing/hay removal is allowed).

The recommended herbicide program may involve a fall application plus a spring application or one or two spring applications. The herbicide applications must be made while the target vegetation is rapidly growing (preferably at a 4 to 6 inch height).

Table 1 (which appears on page 3) provides some suggested herbicide options for controlling competition prior to planting. These options are presented in order of effectiveness and cost. *Note: Two herbicide applications are normally recommended for dense stands of Fescue or other sod forming species and in other areas where competition may not be controlled by one application. However, option 1 could be used in stands of Fescue and other similar species in cases where the planner determines that competition can be controlled with only one herbicide application.* Site specific herbicide application information is provided in Table 2.

Seeding and Seedbed Preparation

Important: Regardless of the seeding method used, the seeding depth for most species should never exceed 1/4 to 1/2 inch. Avoid no-till planting or cultipacking planted seedbeds in wet soil since it may result in placing the seed too deep.

No-till establishment is the preferred method since soil disturbance is minimal, thus reducing weed competition and the risk of soil erosion. Conventional seeding may be used for establishment on areas that have been recently cropped, where weedy competition will be lessened and where the risk of soil erosion is minimal.

No-Till Seeding

Some conventional no-till drills have been retro fitted with a fluffy grass seed box. Care needs to be exercised when setting these drills to ensure that planting depths are no deeper than 1/4 to 1/2 inch. Two common mistakes when no-till planting cool season grasses include pulling the drill too fast and not stopping to check seeding depth often enough.

Conventional Seeding

Prepare a seedbed by plowing and disking. After disking, make at least one trip over the field using a cultipacker to firm the seedbed. The importance of a dry firm seedbed cannot be over emphasized to ensure proper planting depth.

Broadcast seed with a drop spreader. After broadcasting, cultipack or roll the seeded area only once to ensure good seed to soil contact and the proper shallow seeding depth.

Operation and Maintenance

After planting, competition control remains an important part of introduced grass establishment for up to two years after planting. To control competition and prevent weed seed formation, introduced grass stands may benefit from top clipping as needed from May through July especially during the establishment period. Post-emergent herbicides may also be used to control competition during the two-year establishment period when recommended by NRCS, Kentucky Department of Fish and Wildlife Resources (KDFWR) or a Technical Service Provider (TSP).

See the additional information section on page 4 of this job sheet for program specific requirements or additional technical recommendations that may be applicable. Specific job sheets with additional operation and maintenance requirements may also be attached to this job sheet. **If conservation cover is being established under a program, follow management requirements as outlined on the program specific operation and maintenance job sheets.**

Table 1. This table contains two options for controlling competing grass and weed vegetation (with burn down herbicides*) prior to planting introduced grasses. If more than one herbicide application is planned, records should indicate that the herbicide was applied to the field twice. A double rate of herbicide applied once over a field is not considered to be two separate herbicide applications.

Option	Current Condition	Timing	Method
1 Single Application	Cropland Or Grassland	Spring	Remove excess vegetation prior to application if needed. Apply tank mixture after vegetation has re-growth of at least 4 to 6 inches. Apply just prior to planting. Tank Mixture: per acre in April. 1.5 - 2 Quarts Roundup Ultra or similar Glyphosate based product. * Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates.
2 Two Applications	Grassland Grassland	Fall And Spring	Remove excess vegetation prior to application if needed in late summer (Aug./Sept.) Apply tank mixture after vegetation has re-growth of at least 4 to 6 inches. Tank Mixture: per acre in Sept/Oct. 1 to 2 Quarts Roundup Ultra or similar Glyphosate based product. * Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates. Tank Mixture: per acre in April. Apply just prior to planting 1 to 2 Quarts Roundup Ultra or similar Glyphosate based product. * Note: Ammonium Sulfate or other additives may be used when applying herbicide at lower rates.

**NRCS does not require specific herbicides by trade name. The active ingredient in Roundup is Glyphosate. Other brands of herbicide containing similar ingredients may be substituted, however, application rates, application timing, and results vary. Additional information pertaining to vegetation control can be referenced in the University of Kentucky publication "Weed Management In Grass Pastures, Hay Fields, and Fence Rows" (AGR-172)*

Table 2. The following table contains information about a planned herbicide application schedule to be carried out as part of the conservation plan for an introduced grass planting**.** Some herbicide applications will be made prior to planting (pre-planting) to burn down existing vegetation. Other applications may be made after planting (post-planting) to help control competition during establishment. All pesticide products must be used according to label specifications.

Field No.	Pre-Planting Application (Tentative Date)	Post-Planting Application (Tentative Date)	Comments

Table 3. Species and seeding rates will be according to the information provided in the table below. If planned, the application of fertilizers and soil amendments shall be made according to University of Kentucky fertilizer and lime recommendations. The recommendations must be made from a soil test that is performed according to University of Kentucky laboratory soil test procedures. If additional room is needed, make copies of this table and attach it to the back of the job sheet.

Field No.	Acres	Species	Lbs./Ac Seed (PLS)	Total Lbs. Seed (PLS)	Seeding Method (Conventional or No-Till)	Seeding Date/s	Lime Ton/Ac	N Lbs/Ac	P205 Lbs/Ac	K2O Lbs/Ac

Additional Information:

Program specific requirements or additional technical recommendations that may apply are as follows.

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